

AMENDMENTS TO THE CLAIMS

Listing of the Claims

1. (Currently Amended) A method for restoring a binary signal, which can be transmitted via an optical transmission link exhibiting a distortion time, from a distorted binary signal comprising:

determining time intervals, each including at least twice the distortion time, a ~~clock-rate~~duration of high or low pulses of the binary signal including an ~~integral~~integer multiple of one time interval;

detecting an occurrence of level changes of the distorted binary signal in the time intervals;

determining level holding times of the distorted binary signal respectively indicating an amount of time that a level remains unchanged within a time interval; and

restoring the binary signal in the time intervals,

by transferring a level of the distorted binary signal in the time intervals in which no level changes have occurred in the distorted binary signal, and

by transferring a level of the distorted binary signal in the time intervals in which level changes have occurred, only when the respective level holding times reach a ~~predeterminable~~predetermined value.

2. (Previously Presented) The method as claimed in claim 1, wherein a type of distortion, which can be determined in an identification mode of operation, is taken into consideration for weighting the level holding times, for restoring the binary signal in the time intervals in which level changes have occurred.

3. (Previously Presented) The method as claimed in claim 1, wherein, after each level change, the subsequent time intervals are synchronized.

4. (Currently Amended) A circuit arrangement for restoring a binary signal, which can be transmitted via an optical transmission link exhibiting a distortion time, from a distorted binary signal, comprising:

means for determining time intervals, each including at least twice the distortion time, a ~~clock rate~~duration of high or low pulses of the binary signal including an ~~integral~~integer multiple of one time interval;

means for detecting an occurrence of level changes of the distorted binary signal in the time intervals;

means for determining level holding times of the distorted binary signal respectively indicating an amount of time that a level remains unchanged within a time interval; and

means for restoring the binary signal in the time intervals by transferring a level of the distorted binary signal in the time intervals in which no level changes have occurred in the distorted binary signal, and

by transferring a level of the distorted binary signal in the time intervals in which level changes have occurred, only when the respective level holding times reach a ~~predeterminable~~predetermined value.

5. (Previously Presented) The circuit arrangement as claimed in claim 4, further comprising:

first means for taking a type of distortion into consideration, which is determined by the first means in an identification mode of operation, for

weighting the level holding times, for restoring the binary signal in the time intervals in which level changes have occurred.

6. (Previously Presented) The circuit arrangement as claimed in claim 4, further comprising:

means for, after each level change, synchronizing the subsequent time intervals.

7. (Previously Presented) The method as claimed in claim 2, wherein, after each level change, the subsequent time intervals are synchronized.

8. (Previously Presented) The circuit arrangement as claimed in claim 5, further comprising:

means for, after each level change, synchronizing the subsequent time intervals.
